

new/usr/src/uts/common/fs/ufs/ufs\_subr.c

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*****
40638 Mon Feb 15 17:29:58 2016
new/usr/src/uts/common/fs/ufs/ufs_subr.c
6660 ufs may read too many indirect blocks, flush a random block to disk
*****
unchanged_portion_omitted_
565 /*
566 * Flush all indirect blocks related to an inode.
567 * Supports triple indirect blocks also.
568 */
569 int
570 ufs_sync_indir(struct inode *ip)
571 {
572     int i;
573     daddr_t blkno;
574     daddr_t lbn; /* logical blkno of last blk in file */
575     daddr_t clbn; /* current logical blk */
576     daddr32_t *bap;
577     struct fs *fs;
578     struct buf *bp;
579     int bsize;
580     struct ufsvfs *ufsvfsp;
581     int j;
582     daddr_t indirect_blkno;
583     daddr32_t *indirect_bap;
584     struct buf *indirect_bp;
585
586     ufvfsp = ip->i_ufsvfs;
587     /*
588      * unnecessary when logging; allocation blocks are kept up-to-date
589      */
590     if (TRANS_IISTRANS(ufvfsp))
591         return (0);
592
593     fs = ufvfsp->vfs_fs;
594     bsize = fs->fs_size;
595     lbn = (daddr_t)blkno(fs, ip->i_size - 1);
596     if (lbn < NDADDR)
597         return (0); /* No indirect blocks used */
598     if (lbn < NDADDR + NINDIR(fs)) {
599         /* File has one indirect block. */
600         blkflush(ip->i_dev, (daddr_t)fsbtodb(fs, ip->i_ib[0]));
601         return (0);
602     }
603
604     /* Write out all the first level indirect blocks */
605     for (i = 0; i < NIADDR; i++) {
606         for (j = 0; j <= NIADDR; j++) {
607             if ((blkno = ip->i_ib[i]) == 0)
608                 continue;
609             blkflush(ip->i_dev, (daddr_t)fsbtodb(fs, blkno));
610
611             /* Write out second level of indirect blocks */
612             if ((blkno = ip->i_ib[1]) == 0)
613                 return (0);
614             bp = UFS_BREAD(ufvfsp, ip->i_dev, (daddr_t)fsbtodb(fs, blkno), bsize);
615             if (bp->b_flags & B_ERROR) {
616                 brelse(bp);
617                 return (EIO);
618             }
619             bap = bp->b_un.b_daddr;
620             clbn = NDADDR + NINDIR(fs);
621             for (i = 0; i < NINDIR(fs); i++) {
622                 if (clbn > lbn)
623                     break;
624                 clbn += NINDIR(fs);
625             }
626         }
627     }
628 }
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624         if ((blkno = bap[i]) == 0)
625             continue;
626         blkflush(ip->i_dev, (daddr_t)fsbtodb(fs, blkno));
627     }
628
629     brelse(bp);
630     /* write out third level indirect blocks */
631
632     if ((blkno = ip->i_ib[2]) == 0)
633         return (0);
634
635     bp = UFS_BREAD(ufvfsp, ip->i_dev, (daddr_t)fsbtodb(fs, blkno), bsize);
636     if (bp->b_flags & B_ERROR) {
637         brelse(bp);
638         return (EIO);
639     }
640     bap = bp->b_un.b_daddr;
641     clbn = NDADDR + NINDIR(fs) + (NINDIR(fs) * NINDIR(fs));
642
643     for (i = 0; i < NINDIR(fs); i++) {
644         if (clbn > lbn)
645             break;
646         if ((indirect_blkno = bap[i]) == 0)
647             continue;
648         blkflush(ip->i_dev, (daddr_t)fsbtodb(fs, indirect_blkno));
649         indirect_bp = UFS_BREAD(ufvfsp, ip->i_dev,
650             (daddr_t)fsbtodb(fs, indirect_blkno), bsize);
651         if (indirect_bp->b_flags & B_ERROR) {
652             brelse(indirect_bp);
653             brelse(bp);
654             return (EIO);
655         }
656         indirect_bap = indirect_bp->b_un.b_daddr;
657         for (j = 0; j < NINDIR(fs); j++) {
658             if (clbn > lbn)
659                 break;
660             clbn += NINDIR(fs);
661             if ((blkno = indirect_bap[j]) == 0)
662                 continue;
663             blkflush(ip->i_dev, (daddr_t)fsbtodb(fs, blkno));
664         }
665         brelse(indirect_bp);
666     }
667     brelse(bp);
668
669     return (0);
670 }
```

unchanged\_portion\_omitted\_

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